

**Method and Apparatus for Sending and Receiving A Data Structure in a
Constituting Element Occurrence Frequency Based Compressed Form**

ABSTRACT OF THE DISCLOSURE

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In accordance with a first aspect of the present invention, a digital device is provided with a data transmitter designed to receive constituting elements of a data structure, determine occurrence frequency of each unique constituting element in the data structure, assign a cookie representation to each of the unique constituting elements based at least in part on the occurrence frequencies of the unique constituting elements, and transmit the data structure implicitly in a substantively equivalent form that allows a receiver of the data structure in the substantively equivalent form to be able to reconstitute the data structure using the occurrence frequency based cookie representations. In accordance with another aspect of the present invention, a digital device is provided with a data receiver designed to receive unique constituting elements of a data structure transmitted in a pre-determined manner, infer corresponding cookie representations for the received unique constituting elements in accordance with their manner of transmissions under the pre-determined manner of transmission, and receive the constituting elements of the data structure in a representative form. In one embodiment, the data receiver is further designed to reconstitute the constituting elements of the data structure, received in the representative form, based on the inferred cookie representations.